THE IDENTITY OF *ALOE JOHNSTONII* BAK. —A NEW SYNONYM.

By G. W. Reynolds.

(With Plates XII and XIII.)

Aloe johnstonii Bak. was described in *Trans. Linn. Soc.* Ser. II, Bot. ii, 351, *t.* 63 (1887), and is included under "Enumeration of the plants collected by Mr. H. H. Johnston on the Kilima-njaro Expedition 1884, by Prof. D. Oliver, F.R.S., F.L.S., and the Officers of the Kew Herbarium". The locality cited was "Kilima-njaro, 2,000—5,000 ft.", without date, or material stated.

H. H. (later Sir Harry) Johnston, in his book *The Kilima-njaro Expedition* published in 1886, mentions various Aloes in the neighbourhood of Kilimanjaro, and from my knowledge of that region, he had clearly seen the species later described as *A. Volkensii* Engler, *A. lateritia* Engler and *A. secundiflora* Engler. He does not mention a small grasslike Aloe, but he published the "Enumeration of the plants collected by Mr. H. H. Johnston on the Kilima-njaro Expedition 1884", wherein, on page 347, is included "Aloe (Eualoe) Johnstoni, Baker—Kilima-njaro 2,000—5,000 ft.". No mention of Taveta is made in Baker's or Johnston's account.

In his second publication, Baker in *Fl. Trop. Afr.* 7: 456 (1898) omits Kilimanjaro, and gives "British East Africa: Taveta, 2,000 ft., Johnston !"

Berger saw the Johnston sheet at Kew, and in Engler *Pflanzenr.* Liliac.-Aloin. 167 (1908) he quotes "Kilimanjaro: Without precise locality, 2,000—5,000 ft.".

Mr. E. Milne-Redhead informs me that there is no date stated on the sheet, that the locality given is "Taveta, 2,000 ft.", and that there are no other notes on the sheet.

From his text and maps, it is clear that Johnston had been to Rombo, and was also at or very near the places now known as Marangu, Himo and Moshi (2,700 ft.), as well as Taveta (2,525 ft.) which is in Kenya Colony, 2 miles east of the Tanganyika border, 9 miles east of Himo and 26 miles east of Moshi.

It seems that *A. johnstonii* could have been collected somewhere between Moshi and Rombo, on lower grassy slopes of foothills lying to the south-east of Kilimanjaro, rather than near Taveta which is in drier country with less grass and more thorn.

I have not seen specimens from that region, but I have examined material collected by Mr. P. R. O. Bally, botanist at the Coryndon

Museum Nairobi, on the nearby Chyulu Hills to the north-east of Kilimanjaro. This proved to be conspecific with the South African species *A. myriacantha* (Haw.) R. & S. from the Zuurberg, near Grahamstown, in the Eastern Province of the Cape.

On 6th May 1952, accompanied by Mr. Bally, I examined numbers of flowering plants in wet grasslands near the eastern boundary of the Royal Nairobi Golf Course, and more near Langata, about 5 miles south-west of Nairobi. These plants were unquestionably conspecific with the Chyulu Hills species, and in no characters could they be separated from *A. myriacantha* of the Cape.

For these reasons *A. johnstonii* cannot be upheld as being specifically distinct from the earlier described *A. myriacantha* and consequently should go into synonymy.

In the South African and East African plants the narrowly linear leaves are dorsally obtusely keeled, which is a character unfortunately omitted from the description in *Aloes S. Afr.* 116 (1950).

It is not necessary to describe the species again, but the synonymy will now read:

> **A. myriacantha** (Haw.) R. & S. in *Syst. Veg.* 7: 704 (1829); Kunth. *Enum. pl.* 4: 516 (1843); Baker in *Journ. Linn. Soc.* 18: 156 (1880), in Th. Dyer *Fl. capens.* 6: 306 (1896); Schonland in *Rec. Alb. Mus.* 1: 35 (1903); Berger in Engler *Pflanzenr.* Liliac.-Aloin. 166 (1908); Reynolds in *Journ. S.A. Bot.* 13: 100 (1947), in *Aloes S. Afr.* 116 (1950).
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> — *Bowiea myriacantha* Haw. in *Phil. Mag.* 122 (1827).
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> — *Leptaloe myriacantha* (Haw.) Stapf in *Bot. Mag. t.* 9300 (1933); Christian in *Fl. Pl. S. Afr.* 20: Pl. 799 (1940).
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> — *Aloe johnstoni* Bak. in *Trans. Linn. Soc.* Ser. 2, Bot. 2, 351, *t.* 63 (1887), in Th. Dyer *Fl. Trop. Afr.* 7: 456 (1898); Durand et Schinz *Consp. Fl. Afr.* 5: 308 (1893); Engler *Pflanzenw. Ost-Afr.* 140 (1895); Berger in Engler *Pflanzenr.* Liliac.-Aloin. 167 (1908); Reynolds in *Journ. S.A. Bot.* 13: 100 (1947).

The following is the distribution as at present known:

South Africa: Grahamstown, Port Alfred, East London. Zululand: near Richard's Bay.

Southern Rhodesia: Inyanga Downs.

Tanganyika Territory: Kilimanjaro: Bukoba Dist., Kiboroga steppe north of Kagera (c. 1° 10′S 31° 20′E).

Kenya Colony: Chyulu Hills, Machakos, Nairobi, Ngong.

Uganda: The following material is in Herb. Kew.: Ankole: Gayaza, 5,000 ft., May 1929, J. D. Snowdon 1912; E. Ankole, Sanga Rest Camp, 4,400 ft., Oct. 1932, W. J. Eggeling 593; Ankole, Mbarara, 5,000 ft., March 1939, J. W. Purseglove 654. This represents a range of almost 3,000 miles, and is the widest at present known for any species of Aloe in Africa.

In South Africa *A. myriacantha* flowers once a year, in April. In East Africa and Uganda plants flower after the rains, from March until October according to locality, and it appears sometimes more than once a year.

Two plants collected near Nairobi when flowering there on 6th May 1952, flowered in Johannesburg in November 1952, and again in March 1953.

In am indebted to the Director and to Mr. E. Milne-Redhead of Kew for a duplicate illustration of the drawing of *A. johnstonii* used for *t.* 63 in *Trans. Linn. Soc.*, for notes on the type material of *A. johnstonii*, and for the Uganda citations.

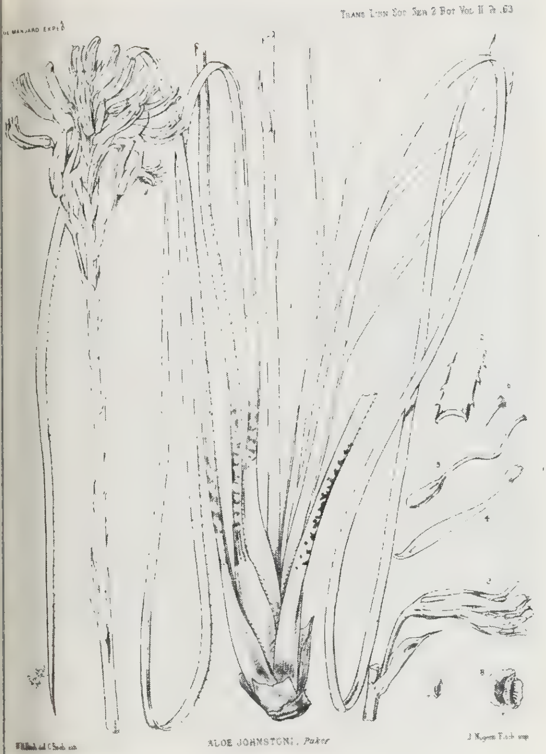

Fig. 1.

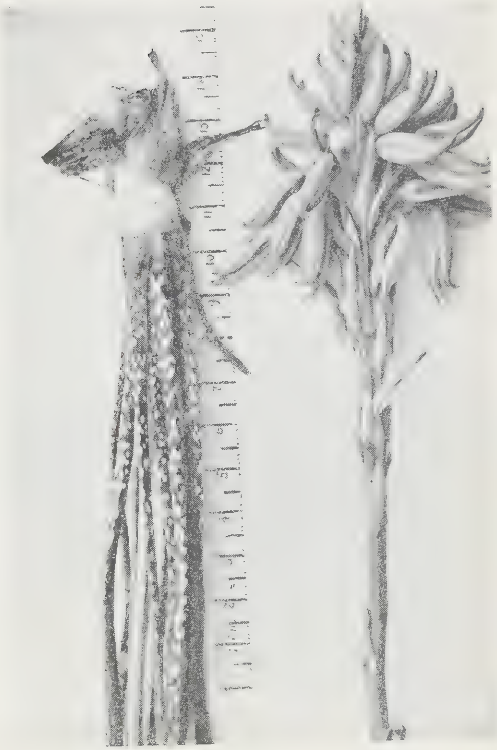

Fig. 2.

PLATE XII. *Aloe myriacantha* (Haw.) R. & S.

Fig. 1. The figure of *A. johnstonii* Bak. in *Trans. Linn. Soc.* Ser. 2, Bot. 2, *t.* 63 (1887).

Fig. 2. Material collected by Mr. P. R. O. Bally, April, 1938, on the Chyulu Hills, north-east of Kilimanjaro, Kenya Colony. *Photo* P. R. O. Bally.

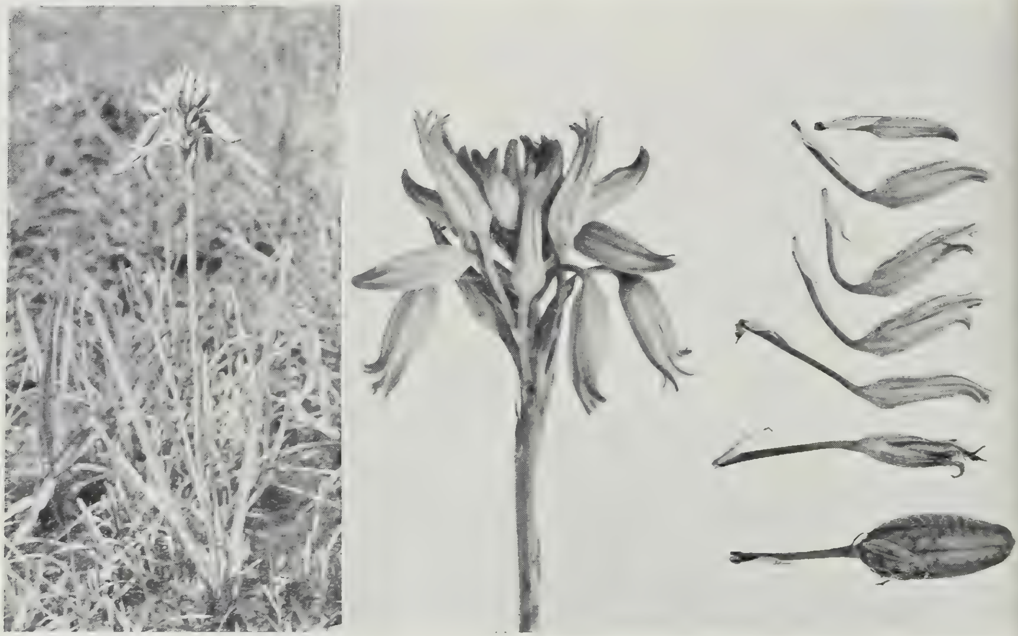

Fig. 1 Fig. 2. Fig. 3.

Plate XIII. *A. myriacantha* (Haw.) R. & S.

Fig. 1. Plant × 1/3, fl. 6th May, 1952, Royal Nairobi Golf Course.
Fig. 2. Raceme 1/1, from a plant fl. 6th May, 1952, Langata, near Nairobi.
Fig. 3. Flowers 1/1, from bud to fruit stage, Langata, near Nairobi.